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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/615,601

07/07/2003

Abhishek Lal

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10/01/2004

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EXAMINER

JEANGLAUDE, JEAN BRUNER

ART UNIT

PAPER NUMBER

2819

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/615,601

Applicant(s)

LAL, ABHISHEK

Examiner

Jean B Jeanglaude

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-14 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Detailed Action

Claim Objection

1. Claim 1 is objected to because of the following informalities: it is suggested to substitute "a" before the word "input" in claim 1, line 1 by -- an --. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Sato (US patent Number 4,710,960).
4. Regarding claims 1, and 4, Sato discloses an improved binary decoder and method (figs. 2, 3) that comprise a selection means [multiplexer] (6, fig. 2) for activating a selected output corresponding to an input binary value [as noted in fig. 2 the multiplexed 6 has as inputs X2, X4 that bits sequence fed to the multiplexer 6 and the multiplexer 6 provides as output X5 a bit sequence] (col 4, lines 3 – 10) and deselecting means [demultiplexer] (11, fig. 3) coupled to each output that deactivates all other outputs when the selected output is activated [as noted in figs. 2, 3, the demultiplexer 11 is connected to the multiplexer 3 that deactivates the output of the multiplexer 3. When activating one of the outputs of the multiplexer 3, the other outputs turn off (deactivate) (col 4, lines 35 – 40).

5. Regarding claim 3, Sato discloses an improved binary decoder (figs. 2, 3) wherein the deselecting means comprises a circuit arrangement having a single input connected to the selected output of the selection means and a plurality of outputs each of which is connected to one of the remaining outputs of the selection means such that when the input of the circuit arrangement is activate all the other output of the decoder forced to the inactive state [as noted in figs. 2, 3, the demultiplexer 11 is connected to the multiplexer 3 that deactivates the output of the multiplexer 3. When activating one of the outputs of the multiplexer 3, the other outputs turn off (deactivate) (col 4, lines 35 – 40).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (US patent Number 4,710,960) in view of the Applicant's admitted prior art (APA)

8. Regarding claim 2, Sato discloses all the limitations as discussed above except an improved binary decoder wherein the selection means comprises a circuit arrangement of gates for selecting output. However, the Applicant's admitted prior art discloses a binary decoder (figs. 1 – 4) wherein the selection means (transistors) comprising of gates to select output (figs. 1 – 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to couple the applicant's

admitted prior art to Sato's system in order to produce digital output from a selected input binary value.

#### Allowable Subject Matter

9. Claims 5 – 14 are allowable.
10. Reasons for allowing the aforementioned claims will be provided in the next office action.

#### Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
12. Bagley et al. (US Patent Number 3,564,510) discloses a selection, distribution and display system.
13. Brown et al. (US patent Number 4,027,152) discloses an apparatus and method for transmitting binary-coded information.
14. Moates (US patent Number 4,374,384) discloses a matrix encoder for resistive sensor arrays.
15. Breslow (US patent Number 4,443,788) discloses an optical encode system.
16. Miki et al. (US patent Number 4,958,157) discloses an encoder circuit with series connected output switching transistors.
17. Ishibashi et al. (US Patent Number 5,008,669) discloses an encoding/decoding system for optical recording/reading.
18. Nozuyama (US Patent Number 5,504,755) discloses a testable programmable logic array.

Art Unit: 2819

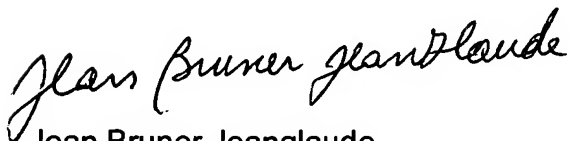
19. Van Valburg et al. (US Patent Number 5,557,275) discloses an error tolerant binary encoder.
20. Miyanishi (US Patent Number 5,629,697) discloses a code conversion circuit.
21. Butts et al. (US patent Number 6,539,535) discloses a programmable logic device having integrated probing structures.
22. Pascucci (US Patent Number 6,696,990) discloses a binary encoding circuit.
23. Lee (US application Number 10/463,318) discloses a high-speed encoder for high speed ADC.
24. Kitayama et al. (JP410164010A) discloses an optical code division multiplex transmission access system and device.

Art Unit: 2819

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B Jeanglaude whose telephone number is 571-272-1804. The examiner can normally be reached on Monday - Friday 7:30 A. M. - 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Tokar can be reached on 571-272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jean Bruner Jeanglaude  
Primary Examiner  
September 24, 2004